# Interim Update: Licensed Acute Care Hospital Beds Fiscal Year 2017 Published August, 2016

### **Background**

An Annual Report profiling changes in licensed acute care hospital beds in Maryland's acute care hospitals was initiated in 2001 to document and track changes in the licensed bed inventory following implementation of a standardized annual licensure renewal process. The process is based on inpatient census and involves notifying hospitals prior to the beginning of each fiscal year concerning the calculated total number of licensed acute care beds for the coming fiscal year. In turn, the hospitals identify the allocation of the total licensed acute care beds across four service categories: medical/surgical/gynecological/addictions ("MSGA"); obstetric, pediatric, and acute psychiatric services. Over time, additional information on hospital service capacity, in both the general and special hospital setting, has been added to the survey.

This interim update provides information on licensed acute care hospital beds in general hospitals for the Fiscal Year 2017, which began on July 1, 2016. The full report, *Annual Report on Selected Maryland General and Special Hospital Services, Fiscal Year 2017*, will be released later this year. That report, in addition to profiling changes in licensed acute care hospital beds, will include updated information on emergency department capacity, surgical services capacity, obstetric and perinatal services capacity, non-acute care beds in the general hospital setting, and specialty hospital beds.

## **Acute Care Hospital Bed Capacity**

Licensed bed capacity for acute care beds in general hospitals in the State of Maryland is dynamic, recalculated and adjusted annually based on average daily acute care census. The Maryland Health Care Commission, in conjunction with the Health Services Cost Review Commission, calculates the average daily census (ADC) of acute care patients for each hospital for the 12-month period ending with the first quarter of each year and total licensed acute care bed capacity is established for the next fiscal year at 140% of the hospital's average daily census during this period. This licensure approach reflects an assumption that an average annual occupancy rate of approximately 71% for acute care hospital beds is an appropriate bench-mark for determining the maximum number of beds an acute care hospital needs to operate.

The initial implementation of this licensure process in FY 2001 resulted in a total of 9,562 licensed acute care beds, removing 2,773 beds from the licensure rolls. Total licensed acute care bed capacity increased, in response to increases in average daily patient census each year after the initial reduction in 2001, peaking at 10,880 beds in FY 2011. The total number of licensed acute care hospital beds in Maryland has declined in every following year, declining to 9,555 beds in the current fiscal year. Thus, Maryland experienced a 13.8% increase in the average daily census of acute care patients between FYE March 31, 2000 and FYE March 31, 2010 and the State has experienced a 12.2% decline in acute care ADC between FYE March 31, 2010 and FYE March 31, 2016.

## <u>Licensed Acute Care Hospital Beds in Maryland: FY 2017</u>

Table 1 shows the licensed acute care bed capacity for each acute care hospital, by service, effective July 1, 2016. The calculation of licensed beds for FY 2017, based on each hospital's ADC during the period April 1, 2015 through March 31, 2016, results in a total of 9,555 licensed acute care hospital beds in Maryland. Table 2 shows the ten-year trend in licensed acute care beds by hospital. Table 3 shows the percent change by region.

Table 1. Licensed Acute Care Beds by Hospital and Service: Maryland, FY 2017

Table 1. L	icensed Acute Care Beds by Hospital and	Service:				
Jurisdiction/ Region	Hospital	MSGA 0	bstetric	Pediatric	Psychiatric	Total
Allegany County	Western Maryland Regional Medical Center	168	9	2	19	198
Frederick County	Frederick Memorial Hospital	186	27	5	21	239
Garrett County	Garrett County Memorial Hospital	24	2	1	0	27
Washington County	Meritus Medical Center	188	17	4	18	227
•	WESTERN MARYLAND TOTAL	566	55	12	58	691
Montgomery County	Adventist HealthCare Shady Grove Medical Center	175	56	25	0	256
	Adventist HealthCare Washington Adventist Hospital	145	20		are Services iatric Psychiatric   2	204
	Holy Cross Germantown Hospital*	75	12	0		93
	Holy Cross Hospital of Silver Spring	303	84			409
	MedStar Montgomery Medical Center	82	11	2		114
				2		
	Suburban Hospital	195	0			222
	MONTGOMERY COUNTY TOTAL	975	183	52		1,298
Calvert County	Calvert Memorial Hospital	60	6	1		76
Charles County	University of Maryland Charles Regional Medical Center	73	12	4		89
Prince George's County	Doctors Community Hospital	190	0	0	0	190
	Fort Washington Medical Center	32	0	0	0	32
	Laurel Regional Hospital	45	0	0	18	63
	MedStar Southern Maryland Hospital Center	133	30	4	25	192
	Prince George's Hospital Center	169	34	2		233
	Total: Prince George's County	569	64	6	71	710
St. Mary's County	MedStar St. Mary's Hospital	73	12			103
	SOUTHERN MARYLAND TOTAL	775	94			978
Anne Arundel County	Anne Arundel Medical Center	302	60			370
	University of Maryland Baltimore Washington Medical Center	254	15			293
	Total: Anne Arundel County	556	75			663
Baltimore City	Bon Secours Hospital	48	0	0		72
	Johns Hopkins Bayview Medical Center	283	22	5		330
	MedStar Good Samaritan Hospital	155	0			155
	MedStar Harbor Hospital	78	24			107
	MedStar Union Memorial Hospital	181	0			209
	Mercy Medical Center	146	32			183
	Sinai Hospital of Baltimore	290	27	26		367
	St. Agnes Hospital	239	20	4 40		263
	The Johns Hopkins Hospital	848	35			1,131
	University of Maryland Medical Center University of Maryland Medical Center Midtown Campus	605 59	30			750 87
	University of Maryland Rehabilitation and Orthopaedics Institute	39	0			01
	Total: Baltimore City	2,936	190			3,658
Baltimore County	Greater Baltimore Medical Center	164	60			232
Dailinote County	MedStar Franklin Square Hospital	267	37			353
	Northwest Hospital Center	162	0			192
	University of Maryland St. Joseph Medical Center	189	20	4		232
	Total: Baltimore County	782	117	21		1,009
Carroll County	Carroll Hospital Center	96	20	7	~~~~~	143
Harford County	University of Maryland Harford Memorial Hospital	59	0	0		85
	University of Maryland Upper Chesapeake Medical Center	159	10	1	0	170
	Total: Harford County	218	10	1	26	255
Howard County	Howard County General Hospital	204	34	6	20	264
·	CENTRAL MARYLAND TOTAL	4,792	446	299	455	5,992
Cecil County	Union Hospital of Cecil County	64	5	3		83
Dorchester County	University of Maryland Shore Medical Center at Dorchester	22	0	0	24	46
Kent County	University of Maryland Shore Medical Center at Chestertown	25	0	1	0	26
Somerset County	Edward W. McCready Memorial Hospital	3	0	0	0	3
Talbot County	University of Maryland Shore Medical Center at Easton	87	17	8	0	112
Wicomico County	Peninsula Regional Medical Center	241	20	8	12	28′
Worcester County	Atlantic General Hospital	45	0	0	0	45
•	EASTERN SHORE TOTAL	487	42	20	47	596
	MARYLAND TOTAL	7,595	820	400	740	9,555

Table 2. Trend in Licensed Acute Care Beds by Hospital: Maryland, FY 2008 - 2017

	able 2. Trend in Licensed Acute Care Be	<del>,                                     </del>		_	<del>,                                    </del>		-				
Jurisdiction/Region	Hospital	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Allegany County	Braddock Hospital	155	154	-	-	-	-	-	-	-	-
	Memorial Hosp. & Med. Ctr. of Cumberland	109	117	-	-	-	-	-	-	-	-
	Western Maryland Regional Medical Center	-	-	262	252	250	234	200	192	195	198
Fradarial: Court	Total: Allegany County	264	271	262	252	250	234	200	192	195	19
Frederick County	Frederick Memorial Hospital	246	269 36	274 33	276	309 30	298	297	258	233	239
Garrett County Washington County	Garrett County Memorial Hospital  Meritus Medical Center	34 264	258	260	31 258	252	29 245	26 237	23 231	25 223	27 227
	WESTERN MARYLAND TOTAL	808	834	829	817	841	806	760	704	676	691
Montgomery County	Adventist HealthCare Shady Grove Medical Center	275	293	320	336	339	331	312	305	290	256
Montgomery County	Adventist HealthCare Washington Adventist Hospital	294	293	288	281	271	252	252	232	230	204
	Holy Cross Germantown Hospital*	234	232	200	201	2/1	232	232	232	93	93
***************************************	Holy Cross Germaniown Hospital	404	408	404	402	409	396	397	391	423	409
	MedStar Montgomery General Hospital	149	165	170	159	158	138	132	120	122	114
	Suburban Hospital	228	238	239	222	233	229	236	220	236	222
M	ONTGOMERY COUNTY TOTAL	1,350	1,396	1,421	1,400	1,410	1,346	1,329	1,268	1,394	1,298
Calvert County	Calvert Memorial Hospital	105	106	98	98	95	95	92	85	77	76
Charles County	Univ. of MD Charles Regional Medical Center	121	129	120	120	124	110	121	115	110	89
Prince George's County	Doctors Community Hospital	192	195	190	195	219	207	198	182	163	190
loo Goorge o Gourny	Fort Washington Medical Center	42	43	43	42	41	31	33	31	34	32
***************************************	Laurel Regional Hospital	95	97	95	87	83	77	78	74	60	63
	MedStar Southern Maryland Hospital Center	258	255	246	235	238	239	227	207	208	192
	Prince George's Hospital Center	264	246	254	244	242	239	214	215	237	233
	Total: Prince George's County	851	836	828	803	823	778	750	709	889	710
St. Mary's County	MedStar St. Mary's Hospital	108	108	103	96	90	90	89	82	91	103
	SOUTHERN MARYLAND TOTAL	1,185	1,179	1,149	1,117	1,132	1,073	1,052	991	980	978
Anne Arundel County	Anne Arundel Medical Center	278	301	316	324	336	380	385	384	375	370
7 unio 7 uniuoi County	Univ. of MD Baltimore Washington Medical Center	293	298	311	321	308	307	319	310	303	293
	Total: Anne Arundel County	571	599	627	645	644	687	704	694	678	663
Baltimore City	Bon Secours Hospital	151	125	126	141	127	115	107	88	72	72
	Johns Hopkins Bayview Medical Center	333	345	346	348	348	355	355	337	341	330
	MedStar Good Samaritan Hospital	265	245	236	235	222	224	206	177	165	155
	MedStar Harbor Hospital	203	215	221	193	179	160	136	120	113	107
	MedStar Union Memorial Hospital	283	292	295	271	231	236	221	205	211	209
	Mercy Medical Center	235	243	244	244	226	233	225	207	184	183
	Sinai Hospital of Baltimore	398	415	413	424	416	426	421	407	392	367
	St. Agnes Hospital	314	307	318	314	296	287	276	264	251	263
	The Johns Hopkins Hospital	982	979	990	994	992	1,000	1,060	1,082	1,129	1,131
	University of Maryland Medical Center	689	705	731	757	779	800	816	801	772	750
	Univ. of MD Medical Center Midtown Campus	209	191	180	167	164	155	128	110	107	87
	Univ. of MD Rehabilitation & Orthopaedic Institute	10	11	10	10	9	9	10	10	7	4
	<u>Total</u> : Baltimore City	4,072	4,073	4,110	4,098	3,989	4,000	3,961	3,808	3,744	3,658
Baltimore County	Greater Baltimore Medical Center	298	310	300	285	281	270	255	245	231	232
	MedStar Franklin Square Hospital	362	380	371	376	347	355	347	354	364	353
	Northwest Hospital Center	213	218	221	215	221	225	243	245	199	192
	Univ. of MD St. Joseph Medical Center	364	354	345	300	263	247	232	238	247	232
	<u>Total</u> : Baltimore County	1,237	1,262	1,237	8,841	1,112	1,097	1,077	1,082	1,041	1,009
Carroll County	Carroll Hospital Center	216	218	213	195	189	158	151	147	140	143
Harford County	Univ. of MD Harford Memorial Hospital	91	104	105	101	97	89	89	84	84	85
	Univ. of MD Upper Chesapeake Medical Center	168	182	196	186	175	181	185	183	180	170
	<u>Total</u> : Harford County	259	286	301	287	272	270	274	267	264	255
Howard County	Howard County General Hospital	219	209	227	238	249	249	253	259	266	264
	CENTRAL MARYLAND TOTAL	6,574	6,647	6,715	6,639	6,455	6,461	6,420	6,257	6,133	5,992
Cecil County	Union Hospital of Cecil County	105	116	113	113	106	92	85	75	84	83
Dorchester County	Univ. of MD Shore Medical Center at Dorchester	49	54	54	53	52	46	41	39	47	46
Kent County	Univ. of MD Shore Medical Center at Chestertown	62	57	53	47	46	42	41	31	30	26
Somerset County	Edward W. McCready Memorial Hospital	8	9	8	8	9	5	4	4	4	3
Talbot County	Univ. of MD Shore Medical Center at Easton	123	120	125	120	116	112	112	112	112	112
Wicomico County	Peninsula Regional Medical Center	366	362	358	362	363	317	288	275	292	281
Worcester County	Atlantic General Hospital	51	53	55	53	53	48	45	48	48	45
	EASTERN SHORE TOTAL	764	771	766	756	745	662	616	584	617	596
<del></del>	MARYLAND TOTA	10,681	10,827	10,880	10,729	10,583	10,348	10,177	9,804	9,800	9,555

Source: Maryland Health Care Commission.

<sup>\*</sup>In FY 2016, this hospital was licensed for its full physical bed capacity because it had not operated for the full 12-month period used to generate a formulaic licensed bed total, as prescribed in law. In FY2017, the Office of Health Care Quality of DHMH issued a license for the hospital's full physical bed capacity at the request of the hospital.

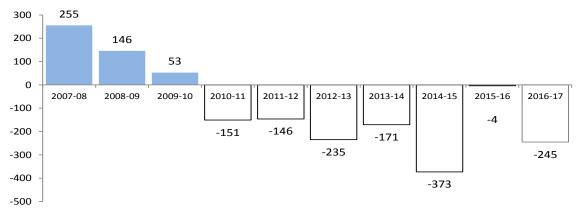
Table 3: Percent Change in Total Licensed Acute Care Beds in General Hospitals By Region of Maryland, Fiscal Year 2009 to Fiscal Year 2017

Region	2009	2010	2011	2012	2013	2014	2015	2016	2017	Average Annual Change 2009- 2017
Western Maryland	3.2%	-0.6%	-1.4%	2.9%	-4.2%	-5.7%	-7.4%	-4.0%	2.2%	-1.7%
Montgomery County	3.4%	1.8%	-1.5%	0.7%	-4.5%	-1.3%	-4.6%	9.9%	-6.9%	-0.3%
Southern Maryland	-0.5%	-2.5%	-2.8%	1.3%	-5.2%	-2.0%	-5.8%	-1.1%	-0.2%	-2.1%
Central Maryland	1.1%	1.0%	-1.1%	-2.8%	0.1%	-0.6%	-2.5%	-2.0%	-2.3%	-1.0%
Eastern Shore	0.9%	-0.6%	-1.3%	-1.5%	-11.1%	-6.9%	-5.2%	5.7%	-3.4%	-2.6%
Maryland Total	1.4%	0.5%	-1.4%	-1.4%	-2.2%	-1.7%	-3.7%	0.0%	-2.5%	-1.2%

Source: Maryland Health Care Commission

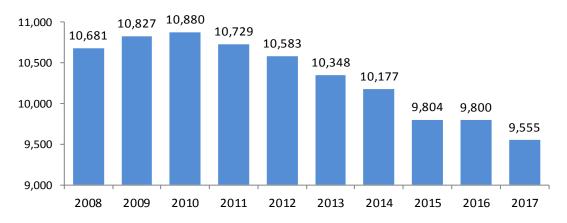
Chart 1 displays the annual net change in licensed acute care beds over the last ten years, while Chart 2 shows the total number of licensed beds over the same period.

Chart 1. Year to Year Change in Total Licensed Acute Care Beds: Maryland Hospitals, FY 2007 - 2017



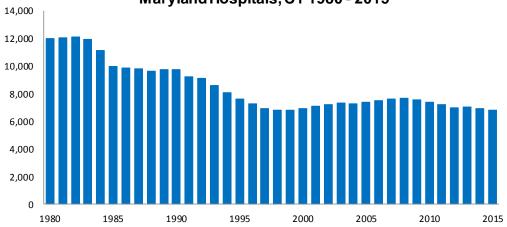
Source: Maryland Health Care Commission

Chart 2. Total Licensed Acute Care Beds: Maryland Hospitals, FY 2008 - 2017



Source: Maryland Health Care Commssion

Chart 3. Trend in Average Daily Acute Care Patient Census: Maryland Hospitals, CY 1980 - 2015



Source: Maryland Health Care Commission. Note: Data reported is based on the Hospital Discharge Abstract Data Base for calendar years 1980 - 2015 and reflects the average daily census for all services excluding newborn and rehabilitation services.

While the average daily census of acute care patients began to gradually trend upward in the late 1990's, after over twenty years of decline, hospital utilization in Maryland never returned to historic peaks. In calendar year 2009 average daily census saw the first decline since dynamic hospital bed licensure went into effect in 2001 and this trend has continued. Chart 3 shows the trend of declining acute care census from the early 1980s through the late 1990s, the extent of the rebound in census that occurred in the next ten years and the recent return to gradual decline after 2008.

Table 4 profiles the FY 2016 - 2017 change in total licensed acute care hospital beds from a regional perspective. The State as a whole experienced a drop in licensed bed capacity of 245 beds, or 2.5%. Four of Maryland's five traditionally-defined health planning regions saw licensed bed capacity shrink in FY 2017. Statewide, twelve hospitals saw an increase in acute care ADC and, thus, an increase in bed capacity, thirty-two hospitals saw reduced ADC and licensed bed capacity, and three hospitals experienced no change in ADC/licensed bed capacity between FYE March 31, 2015 and FYE March 31, 2016.

Table 4. Change in Number of Total Licensed Acute Care Beds by Region:
Maryland Hospitals, FY 2016 - FY 2017

Region	Total Number of Hospitals	Net Change in Number of Total Licensed Beds	Percent Change	Number of Hospitals with an Increase in Beds	Number of Hospitals with a Reduction in Beds	Number of Hospitals with No Change in Hospital Beds
Western Maryland	4	15	2.2%	4	0	0
Montgomery County	6	(96)	-6.9%	0	5	1
Southern Maryland	8	(2)	-0.2%	3	5	0
Central Maryland	22	(141)	-2.3%	5	16	1
Eastern Shore	7	(21)	-3.4%	0	6	1
MARYLAND TOTAL	47	(245)	-2.5%	12	32	3

Source: Maryland Health Care Commission

Tables 5 and 6 profile the change in the inventory of licensed acute care hospital beds for the past ten fiscal years for the four acute care bed service categories. As can be seen, there have been no dramatic changes in the allocation of acute care beds by Maryland's hospitals over this period, with MSGA beds accounting for an average of 80-82% of total acute care beds, obstetric beds comprising an average of 8-9%, acute psychiatric beds, on average, 6-8% of total, and pediatric beds, 4% of total. Licensed bed capacity allocated to psychiatric services is the only service category of the four that saw fairly consistent growth over this nine-year period.

Table 5. Allocation of Licensed Acute Care Beds by Service Maryland Hospitals. FY2007 - 2017

			,		1					
Service Category	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
MSGA	8,694	8,827	8,890	8,738	8,590	8,352	8,198	7,835	7,850	7,595
Obstetric	848	854	851	848	851	851	827	823	832	820
Pediatric	458	459	451	452	447	442	438	422	396	400
Acute Psychiatric	681	687	688	691	695	703	714	724	722	740
TOTAL	10,681	10,827	10,880	10,729	10,583	10,348	10,177	9,804	9,800	9,555

Source: Maryland Health Care Commission

Table 6. Allocation of Licensed Acute Care Beds by Service (Percentage),
Maryland Hospitals, FY 2007 - FY 2017

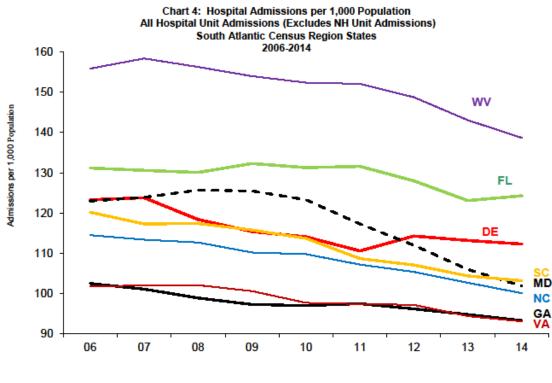
Service Category	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
MSGA	81.4%	81.5%	81.7%	81.4%	81.2%	80.7%	80.6%	79.9%	80.1%	79.5%
Obstetric	7.9%	7.9%	7.8%	7.9%	8.0%	8.2%	8.1%	8.4%	8.5%	8.6%
Pediatric	4.3%	4.2%	4.1%	4.2%	4.2%	4.3%	4.3%	4.3%	4.0%	4.2%
Acute Psychiatric	6.4%	6.3%	6.3%	6.4%	6.6%	6.8%	7.0%	7.4%	7.4%	7.7%
TOTAL	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Source: Maryland Health Care Commission

#### Demand for Hospital Beds in Maryland Compared with Regional and National Trends

The following graphs profile information from *Hospital Statistics*, an annual publication of the American Hospital Association. They reflect this publication's reported acute care hospital use rates and average stay statistics for Maryland and contrasts the demand reported for other Southeastern States and the U.S. experience.

The first two graphs compare hospital admissions per thousand population and average length of hospital stay in Maryland with the experience of the seven other states in the South Atlantic Census Region. This data is not age-adjusted. The relative age of the population in these states is an important factor in interpreting these hospital use rates. Florida and West Virginia are the oldest states in this region. The U.S. Census Bureau estimates that 19.5% and 18.2%, respectively, of the total 2015 estimated population of these two states was aged 65 or older. Delaware, South Carolina, and North Carolina are the next oldest, with 17%, 16.2%, and 15.1% of total population, respectively, aged 65+. Virginia and Maryland have very similar elderly age bands, 14.2% and 14.1%, respectively. Georgia is the youngest state in this region at 12.8% of its estimated population estimated to be 65 and older.

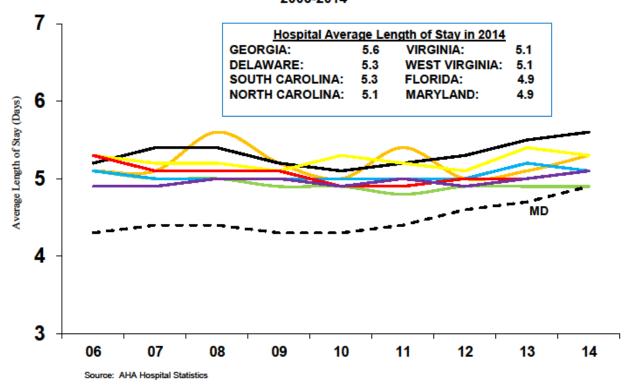


Source: AHA Hospital Statistics (2012-2015 Editions)

As will be noted, from a regional perspective, Maryland's admissions rate has been lower throughout the eight-year period shown than that of the oldest states in the South Atlantic region, Florida and West Virginia, as would be expected. More recently, Maryland's admissions rate also dropped below that of Delaware and, in 2014, below that of South Carolina, both of which are older states. The Maryland use rate continues to be higher than that of Virginia, a state with a very similar proportion of elderly in its population. Beginning in 2010, Maryland's admissions rate has declined more steeply than that of any other state in this region.

Maryland stood out, during most of the eight-year period shown in Chart 5, with a distinctly shorter average length of hospital stay, when compared with the other South Atlantic Region states. That gap has steadily closed however, indicating that Maryland's recent decline in admissions was largely due to reductions in short-stay hospitalizations.

Chart 5: Hospital Average Length of Stay
All Hospital Unit Admissions (Excludes NH Unit Admissions)
South Atlantic Census Region States
2006-2014



The following graphs, taken from the same data source, provide a longer-term perspective on hospital bed use in Maryland and the Nation. Maryland had an enviable record with respect to admissions rate and average length of hospital stay in the 1990s but this changed during the previous decade. Hospital use rates in Maryland peaked in the 2008-09 period, at approximately 8-9% higher than the overall National use rate but have steeply declined in the following years.

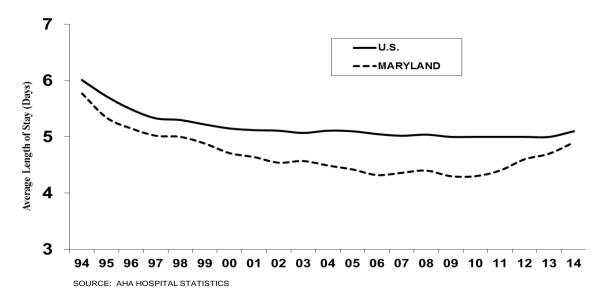
Maryland has been steadily discharging hospital patients more quickly, on average, than has been the National experience. Similar to the regional trend shown previously, there has been a narrowing of the gap between Maryland's ALOS and that of the U.S. over the last twenty years, as Maryland hospitals have reduced short stays, in many cases, replacing such stays with "observation" admissions, that are outpatient care and are not recorded as hospital admissions in this AHA data survey data. The Health Services Cost Review Commission initiated policy changes in recent years aimed at reducing short-stay admissions, prompted by data indicating a relatively high proportion of one-day stays in the State. Further narrowing of the gap between Maryland and the nation with respect to hospital length of stay can be anticipated.

Chart 6: Hospital Admissions per 1,000 Population
All Hospital Unit Admissions (Excludes NH Unit Admissions)
U.S. and Maryland
1994-2014



Source: AHA Hospital Statistics (Average of Published Rates, 2000, 2002-2007, 2009-2016 Editions)

Chart 7: Hospital Average Length of Stay All Hospital Unit Admissions (Excludes NH Unit Admissions) U.S. and Maryland 1994-2014



Note concerning the AHA data: The American Hospital Association (AHA) conducts an annual survey of all hospitals, both AHA-registered and nonregistered, in the U.S. and its associated areas. AHA reports that, overall, the average response rate in the past five years has been approximately 85 percent.